

CLAIMS

1. A method of using IPMP Data in IPMP system, at the content author side, comprising:
 - 5 Constructing a database which contains information to be used for IPMP tool required to process and protect content;
Creating an IPMP data from the information contained in the database;
Adding the IPMP data to the content to creat IPMP Protected content.
- 10 2. The Method of using IPMP Data in IPMP system according to claim 1, at the content author side,
wherein the IPMP data is constructed by extracting information from the database based on a defined IPMP data syntax.
3. The Method of using IPMP Data in IPMP system according to claim 2, at the content author side, further comprising carrying the IPMP data in IPMP
15 Descriptor in IPMP Control Graph, which is subsequently carried in PSI.
4. The Method of using IPMP Data in IPMP system according to claim 2, at the content author side, wherein the IPMP data is wrapped in IPMP_StreamDataUpdate which has a destination address indicating which tool the IPMP data should be sent to.
- 20 5. The Method of using IPMP Data in IPMP system according to claim 1, wherein the IPMP Protected content is MPEG-2 content.
6. The Method of using IPMP Data in IPMP system according to claim 2, wherein the IPMP Protected content is MPEG-4 content, and
wherein the method further comprises Carrying the IPMP data in
25 IPMP_Tool_Descriptor in OD stream.

7. The Method of using IPMP Data in IPMP system according to claim 2,
wherein the IPMP Protected content is MPEG-4 content, and
wherein the method further comprises Carrying the IPMP data in
IPMP_Initialize which is subsequently carried in IPMP_Tool_Descriptor in OD
5 stream.
8. The Method of using IPMP Data in IPMP system according to claim 2,
wherein the IPMP Protected content is MPEG-4 content, and
wherein the method further comprises Carrying the IPMP data in IPMP
Stream, which is wrapped in IPMP_StreamDataUpdate which has a destination
10 address indicating which tool the IPMP data should be sent to.
9. The Method of using IPMP Data in IPMP system according to claim 2,
wherein the IPMP Protected content is MPEG-n content, and
wherein the method further comprises Carrying the IPMP data in defined
position in the MPEG-n IPMP content stream.
- 15 10. A Method of using IPMP Data in IPMP system, at the IPMP terminal side,
comprising:
Extracting IPMP Descriptor containing IPMP data from IPMP Protected
content; and
Delivering IPMP Descriptor containing the IPMP data to a IPMP tool
20 which is also indicated in IPMP Descriptor by the means of IPMP Tool ID,
wherein the IPMP tool, upon receiving of such a IPMP Data, interprets it
according to the specific IPMP data syntax, and act upon it.
11. A Method of using IPMP Data in IPMP system, at the IPMP terminal side,
according to claim 10, further comprising:
25 Demultiplexing the IPMP Stream containing the IPMP data from the

IPMP Protected content; and

Delivering each IPMP_StreamDataUpdate containing the IPMP data to the IPMP tool whose address is indicated in the above mentioned IPMP_StreamDataUpdate,

5 wherein the IPMP tool, upon receiving of such an IPMP Data, interprets it according to the specific IPMP data syntax, and act upon it.

12. A Method of using IPMP Data in IPMP system, at the IPMP terminal side, according to claim 10, wherein the IPMP Protected content is MPEG-2 content.

13. A Method of using IPMP Data in IPMP system, at the IPMP terminal side,
10 according to claim 12, further comprising:

Extracts the IPMP_Tool_Descriptor containing the IPMP data from the IPMP Protected content; and

Delivering the IPMP_Tool_Descriptor containing the IPMP data to the IPMP tool which is also indicated in IPMP_Tool_Descriptor by the means of
15 IPMP Tool ID in IPMP_Tool_Descriptor,

wherein the IPMP tool, upon receiving of such a IPMP Data, interprets it according to the specific IPMP data syntax, and act upon it.

14. A Method of using IPMP Data in IPMP system, at the IPMP terminal side, according to claim 10,

20 wherein the IPMP Protected content is MPEG-4 content,

wherein the method further comprises:

Extracts the IPMP_Initialize containing the IPMP data from the IPMP_Tool_Descriptor from the IPMP Protected content;

Delivering the IPMP_Tool_Descriptor containing the above mentioned
25 IPMP_Initialize which subsequently carries IPMP data to the IPMP tool which is

also indicated by the means of IPMP Tool ID in IPMP_Tool_Descriptor,

wherein the IPMP tool, upon receiving of such an IPMP Data, interprets it according to the specific IPMP data syntax, and act upon it.

15. A Method of using IPMP Data in IPMP system, at the IPMP terminal side,
5 according to claim 10,

wherein the IPMP Protected content is MPEG-4 content,

wherein the method further comprises:

Extracts the IPMP_StreamDataUpdate containing the IPMP data from the IPMP Stream from the IPMP Protected content;

- 10 Delivering the IPMP_StreamDataUpdate containing the above mentioned IPMP data to the specific tool which is also indicated in IPMP_StreamDataUpdate by the means of IPMP_ToolDescriptorID, and

wherein the IPMP tool, upon receiving of such an IPMP Data, interprets it according to the specific IPMP data syntax, and act upon it.

- 15 16. A Method of using IPMP Data in IPMP system, at the IPMP terminal side, according to claim 10,

wherein the IPMP Protected content is MPEG-n content,

wherein the method further comprises:

- 20 Extracting the IPMP Data from the defined position in the IPMP Protected content; and

Delivering the IPMP Data to the IPMP tool which is also indicated by the means of IPMP Tool ID associated with the IPMP Data,

wherein the IPMP tool, upon receiving of such an IPMP Data, interprets it according to the specific IPMP data syntax, and act upon it.

- 25 17. A Method of using IPMP Data in IPMP system, at the IPMP terminal side,

according to claim 10,

wherein the IPMP Protected content is MPEG-n content,

wherein the method further comprises:

5 Extracting the IPMP video watermarking initialization data from the
defined position in the IPMP Protected content; and

Delivering the IPMP video watermarking initialization data to the specific
video watermarking tool which is also indicated by the means of IPMP Tool ID
associated with the IPMP Data,

10 wherein the IPMP video watermarking tool, upon receiving of such an
IPMP Data, interprets it according to the specific IPMP data syntax, and act
upon it, and

wherein the IPMP video watermarking tool, when detecting a watermark
from the video stream, notifies the terminal using IPMP_SendVideoWatermark
message.